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EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 12/15/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/387,938

Applicant(s)

KLINGMAN, EDWIN E.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7-19, 21-28, 30 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7-19, 21-28, 30 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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Allowable Subject Matter

1. The indicated allowability of claims 2-5, 7-19, 21-28, 30, and 32-34 is withdrawn in view of the newly discovered reference(s) to Sonesh, Mathis, Fogg, White, Wilkinson, Hagemann, and Newton. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 21, 26, 28, 30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762) in view of Mathis (US 6,269,254).

Regarding claims 21, 26, 28, and 30, Sonesh teaches a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes (fig. 1:

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ACD MINICOMPUTER, note only one shown in the diagram), of managing incoming calls for an organization having a plurality of departments (group of agents selected based upon area of interest, col. 7 lines 23-25) and a plurality of agents (fig. 1 see agent telephones and workstations).

The method comprises receiving one or more incoming calls by a call manager object (fig. 1: ACD-minicomputer). Note the call manager object of Sonesh is the software located on the ACD-minicomputer that processes the calls.

The method comprises playing a voice menu describing a plurality of selection items in a department table corresponding to a department in the organization, (col. 5 lines 34 - 39, service and/or area of interest, col. 7 lines 22-23), wherein the department table has a plurality of rows and columns, wherein the rows are selected by the caller and the columns of the selected row contain information used by the call manager object to implement a call-management policy, the columns including fields for specifying a voice menu file for the selected row, the availability of an agent, the agent's directory number, the availability of another department, and the availability of voice mail for the department for the call-management policy. The examiner maintains the "department table"

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of Sonesh is accessed by the user selecting the desired criteria.

The method comprises receiving one or more input signals (col. 7 lines 21-23).

The method comprises managing the incoming call (col. 7 lines 23-25).

Although Sonesh teaches processing the incoming call information in response to the incoming call (name, password, service, interest, col. 7 lines 21-25), Sonesh is silent on the use of call objects to process the information.

Mathis teaches creating an associated call object for each incoming call in response to receiving the incoming call (Java objects, col. 13 lines 21-29).

Therefore it would have been obvious to one of ordinary skill in the art, having both Sonesh and Mathis before him/her and with the teachings [a] as shown by Sonesh, a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes, and [b] as shown by Mathis, creating an associated call object for each incoming call in response to receiving the incoming call, to be motivated to modify the system of Sonesh by storing the users information in a Java object. This modification can be performed in

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software. This would improve the system since Java code is easily transported across different computer platforms.

Regarding claim 26, in addition to the limitations previously listed, determining if the agent is available (if an agent is available, col. 7 lines 25-26), if the agent is available obtaining the agent's number and transferring the call to the agent (col. 7 lines 25-27).

Regarding the limitation if the agent is not available and if another department table is available, obtaining another department from the organization database, the examiner maintains this process is implied in searching for an unoccupied agent (if an agent is available, col. 7 lines 25-26).

Regarding the limitation call manager object disconnecting from the caller after the call manager object has transferred the call to the call agent, the examiner takes official reference that this step is obvious. By disconnecting from the caller, the call manager object is freed up processing capability to process other calls. Maintaining the connection serves no purpose since the call agent is processing the call.

Regarding claim 28, in addition to the limitations previously listed, ISDN (col. 5 lines 22-23), a main memory

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(fig. 1: ACD MINICOMPUTER), and the main memory stores a computer program (fig. 1: ACD MINICOMPUTER).

Regarding claim 34, the department table may contain Java objects, the limitation of Java objects has previously been discussed.

4. Claims 2-5, 7-15, 17, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762) in view of Mathis (US 6,269,254) and Fogg (US 5,841,839).

Regarding claim 7, Sonesh teaches a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes (fig. 1: ACD MINICOMPUTER, note only one shown in the diagram), of managing incoming calls for an organization having a plurality of departments (group of agents selected based upon area of interest, col. 7 lines 23-25) and a plurality of agents (fig. 1 see agent telephones and workstations).

The method comprises receiving one or more incoming calls by a call manager object (fig. 1: ACD-minicomputer). Note the call manager object of Sonesh is the software located on the ACD-minicomputer that processes the calls.

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The method comprises playing a voice menu describing a plurality of selection items in a department table corresponding to a department in the organization, (col. 5 lines 34 - 39, service and/or area of interest, col. 7 lines 22-23)

The method comprises receiving one or more input signals (col. 7 lines 21-23).

The method comprises managing the incoming call (col. 7 lines 23-25).

The method comprises determining if the agent is available (if an agent is available, col. 7 lines 25-26), if the agent is available obtaining the agent's number and transferring the call to the agent (col. 7 lines 25-27).

Although Sonesh teaches processing the incoming call information in response to the incoming call (name, password, service, interest, col. 7 lines 21-25), Sonesh is silent on the use of call objects to process the information.

Mathis teaches creating an associated call object for each incoming call in response to receiving the incoming call (Java objects, col. 13 lines 21-29).

Therefore it would have been obvious to one of ordinary skill in the art, having both Sonesh and Mathis before him/her and with the teachings [a] as shown by Sonesh, a method and apparatus for a data processing system for managing incoming

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calls having a plurality of computing nodes, and [b] as shown by Mathis, creating an associated call object for each incoming call in response to receiving the incoming call, to be motivated to modify the system of Sonesh by storing the users information in a Java object. This modification can be performed in software. This would improve the system since Java code is easily transported across different computer platforms.

Sonesh is silent on the combination of voice mailbox and operator information; if the voice mail is not available, transferring the call to the operator; and if the operator is not available, recording a message from the caller in the default mailbox.

Fogg teaches integrating voice mailbox and operator information (col. 9 lines 20-25); if the voice mail is not available, transferring the call to the operator (col. 9 lines 20-25); and if the operator is not available, recording a message from the caller in the default mailbox (col. 9 lines 20-25). Note, the examiner corresponds the applicant's default mailbox with the live operator's mailbox in the reference.

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Sonesh and Mathis and Fogg before him/her and with the teachings [a] as shown by the combination of Sonesh and Mathis, a method and

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apparatus for a data processing system for managing incoming calls having a plurality of computing nodes, and [b] as shown by Fogg, a backup system for allowing the user to leave a message if the voice mailbox is not available, to be motivated to modify the system of the combination of Sonesh and Mathis by integrating an operator into the system as taught by Fogg. This would improve the system by allowing the user to leave a voicemail if the agent's mailbox is not available.

Regarding the limitation call manager object disconnecting from the caller after the call manager object has transferred the call to the call agent, the examiner takes official reference that this step is obvious. By disconnecting from the caller, the call manager object is freed up processing capability to process other calls. Maintaining the connection serves no purpose since the call agent is processing the call.

Regarding claim 2, listening for an incoming call and connecting to the incoming call (Sonesh: fig. 1 ACD-minicomputer).

Regarding claim 3, receiving a selection event from the caller and determining from the selection event what was selected (Sonesh: agents are selected based on the caller

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identification and service and/or area of interest, col. 7 lines 23 - 25).

Regarding claim 4, the selection event is a DTMF tone produced by the caller (Sonesh: col. 5 lines 55 - 59).

Regarding claim 5, the selection event is voice input (Sonesh: voice recognition, col. 5 lines 58 - 59).

Regarding claim 8, all agents have access to the database (Sonesh: col. 6 lines 48 - 51).

Regarding claim 9, 24, and 25, in addition to the limitations listed in claims 1 and 26, Sonesh teaches an ISDN interface (Sonesh: col. 5 lines 13 - 32).

Regarding claim 10, the examiner takes official notice that it is common practice to operate on the D-channel of ISDN with the X.25 protocol.

Regarding claim 11, information communicated includes agent status and queries not visible to the caller (Sonesh: agent

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station has access to external communication services, col. 2 lines 40 - 61).

Regarding claim 12, agents can communicate to each other via the Internet (Sonesh: fig. 1 box 125, 113, and 120).

Regarding claim 13, the incoming call has caller ID information associated with it (Sonesh: col. 7 lines 18-19), transferring the incoming call based on the caller ID (Sonesh: col. 7 lines 23-24), and disconnecting from the call (Sonesh: col. 7 lines 27-28).

Regarding disconnecting, after the call manager object has transferred the call to the call agent, the examiner takes official reference that this step is obvious. By disconnecting from the caller, the call manager object is freed up processing capability to process other calls. Maintaining the connection serves no purpose since the call agent is processing the call.

Regarding claim 14, the department table may contain Java objects, the limitation of Java objects has previously been discussed.

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Regarding claim 15, the Java object in the table is a voice menu file. Note, Sonesh teaches a voice response to the caller (Interactive Voice Response, col. 6 lines 55-58).

Regarding claim 17, the Java object in the table is a file object (Interactive Voice Response, col. 6 lines 55-58). Note, examiner corresponds accessing the Interactive Voice Response file with a file object.

Regarding claim 23, the call manager object can invoke different call objects (Sonesh: voice menu, col. 5 lines 28-31).

Regarding claims 24 and 25, ISDN (col. 5 lines 22-23).

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762) Mathis (US 6,269,254) and Fogg (US 5,841,839), as applied to claim 14, in view of Newton.

The combination is silent on XML.

Newton teaches companies are seizing upon the ability of XML to allow structured exchanges of data between machines and the web (pg. 858-859).

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Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Sonesh, Mathis, and Fogg and Newton before him/her and with the teachings [a] as shown by the combination of Sonesh, Mathis, and Fogg, a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes, and [b] as shown by Newton, companies are seizing upon the ability of XML to allow structured exchanges of data between machines and the web, to be motivated to modify the system of the combination of Sonesh, Mathis, and Fogg by writing the Java objects as XML objects. This modification can be performed in software. This would improve the system since XML allows for easy exchange of data between machines and the web.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762) Mathis (US 6,269,254) and Fogg (US 5,841,839), as applied to claim 14, in view of White (US 6,438,559).

The combination is silent on JDBC accessible tables.

White teaches JDBC accessible tables (col. 5 lines 56-58).

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Sonesh, Mathis, and Fogg and White before him/her and with the teachings [a] as

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shown by the combination of Sonesh, Mathis, and Fogg, a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes, and [b] as shown by White, JDBC accessible tables integrate with SQL, to be motivated to modify the system of the combination of Sonesh, Mathis, and Fogg by writing the department tables as JDBC accessible. This modification can be performed in software. This would improve the system since SQL is a standard and therefore the system can be easily integrated in larger systems.

7. Claims 22 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762), Mathis (US 6,269,254), and Fogg (US 5,841,839) as applied to claims 7 and 14, in view of Wilkinson (US 6,492,989).

Regarding claim 22, the system comprises each call object is managed by the call manager object (Sonesh: fig. 1: ACD-minicomputer).

The combination is silent on each call object being an element in an array of call objects.

Wilkinson teaches each call object/Java object being an element in an array of call objects (col. 12 lines 27-28).

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Sonesh, Mathis,

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and Fogg and Wilkinson before him/her and with the teachings [a] as shown by the combination of Sonesh, Mathis, and Fogg, a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes, and [b] as shown by Wilkinson, each call object being an element in an array of call objects, to be motivated to modify the system of the combination of Sonesh, Mathis, and Fogg by storing the call objects in an array. This modification can be performed in software. This would improve the system since it is well known that arrays are an efficient use of storage.

Regarding claim 18, the examiner the examiner equates the table object and table of claim 18 with the call object and array of call objects of claim 22.

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762) Mathis (US 6,269,254), as applied to claim 26, in view of and Fogg (US 5,841,839).

Regarding the limitation if another department table is not available, determining from the table whether the department voice mail is available (col. 7 lines 43-46).

Sonesh is silent on the combination of voice mailbox and operator information; if the voice mail is not available,

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transferring the call to the operator; and if the operator is not available, recording a message from the caller in the default mailbox.

Fogg teaches integrating voice mailbox and operator information (col. 9 lines 20-25); if the voice mail is not available, transferring the call to the operator (col. 9 lines 20-25); and if the operator is not available, recording a message from the caller in the default mailbox (col. 9 lines 20-25). Note, the examiner corresponds the applicant's default mailbox with the live operator's mailbox in the reference.

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Sonesh and Mathis and Fogg before him/her and with the teachings [a] as shown by the combination of Sonesh and Mathis, a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes, and [b] as shown by Fogg, a backup system for allowing the user to leave a message if the voice mailbox is not available, to be motivated to modify the system of the combination of Sonesh and Mathis by integrating an operator into the system as taught by Fogg. This

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762) and Mathis (US

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6,269,254), as applied to claim 28, in view of Hagemann (US 6,577,724).

The combination is silent on a Java-ISDN interface.

Hagemann teaches a Java-ISDN interface (JTAPI, col. 1 lines 50-55).

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Sonesh and Mathis and Hagemann before him/her and with the teachings [a] as shown by the combination of Sonesh and Mathis, a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes, and [b] as shown by Hagemann, a Java-ISDN interface, to be motivated to modify the system of the combination of Sonesh and Mathis by using a Java-ISDN interface that is JTAPI compliant. This modification can be performed in hardware. This would improve the system since JTAPI compliant devices are industry standard approved and tested.

10. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762) and Mathis (US 6,269,254), as applied to claim 28, in view of White (US 6,438,559).

The combination is silent on JDBC accessible tables.

White teaches JDBC accessible tables (col. 5 lines 56-58).

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Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Sonesh and Mathis and White before him/her and with the teachings [a] as shown by the combination of Sonesh and Mathis, a method and apparatus for a data processing system for managing incoming calls having a plurality of computing nodes, and [b] as shown by White, JDBC accessible tables integrate with SQL, to be motivated to modify the system of the combination of Sonesh and Mathis by writing the department tables as JDBC accessible. This modification can be performed in software. This would improve the system since SQL is a standard and therefore the system can be easily integrated in larger systems.

Response to Arguments


11. Applicant's arguments with respect to independent claims 7, 21, 26, 28, and 30 have been considered but are moot in view of the new ground(s) of rejection. The examiner agrees that the combination of Sonesh and Reksten does not teach a call object (applicant: pg. 7 lines 15-23).


Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.


Ronald Abelson
Examiner
Art Unit 2666


MELVIN MARCELO
PRIMARY EXAMINER